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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/632,806	08/04/2003	Katsuhiko Takahashi	03500.014833.1	5546

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NEW YORK, NY 10112

EXAMINER
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SHOSHO, CALLIE E

ART UNIT	PAPER NUMBER
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1714

DATE MAILED: 12/08/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/632,806

Applicant(s)

TAKAHASHI ET AL.

Examiner

Callie E. Shosho

Art Unit

1714

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 17 June 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

#### **Claim Rejections - 35 USC § 103**

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
2. Claims 1-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kurabayashi (U.S. 6,790,878) in view of Taniguchi et al. (U.S. 2001/0018474).

The rejection is adequately set forth in paragraph 3 of the office action mailed 6/17/05 and is incorporated here by reference.

#### **Response to Arguments**

3. Applicants' arguments filed 9/19/05 have been fully considered, however, they are not persuasive.

Specifically, applicants argue that there is no motivation to combine Kurabayashi with Taniguchi et al. given that Kurabayashi et al. discloses the use of resin encapsulated colorant wherein the resin has cationic group wherein the resin encapsulated colorant is *dispersed* in the ink while Taniguchi et al. disclose the use of cationic water-soluble resin that is *dissolved* in the ink.

However, while it is agreed that Kurabayashi discloses resin encapsulated colorant that is dispersed in the ink and Taniguchi et al. disclose cationic water-soluble resin that is dissolved in the ink, it is significant to note that both Kurabayashi and Taniguchi et al. disclose that the ink

contains aqueous medium comprising water and water-soluble organic solvent (Kurabayashi – col.9, lines 14-40 and Taniguchi et al. – paragraphs 37, 39, and 41). In addition, Taniguchi et al. disclose the use of solvent, several of which overlap the solvents disclosed by Kurabayashi, and which include propylene urea and ethylene urea as presently claimed. Thus, although Kurabayashi discloses dispersible resin and Taniguchi et al. disclose dissolvable resin, they each disclose the use of same type of medium or carrier for the ink. Given this, one would have expected the advantages cited from the use of solvents in Taniguchi et al. would apply to the ink of Kurabayashi. Further, Taniguchi et al. disclose that the solvent, i.e. propylene urea or ethylene urea, identical to the presently claimed water-soluble compound is used in order to produce ink that is stably printed at low temperature. Thus, given that Taniguchi et al. disclose inkjet ink comprising carrier or medium that contains water and solvent as does Kurabayashi and given that Taniguchi et al. provides motivation for using such solvent, it would have been obvious to one of ordinary skill in the art to use the solvent in the ink of Kurabayashi et al. in order to produce ink that prints stably at low temperature.

Applicants also argue that of the solvents listed in Taniguchi et al., there is no particular advantage to use propylene urea or ethylene urea as compared to the other listed solvents. While Taniguchi et al. do not disclose any particular advantages for using propylene urea or ethylene urea as compared to the other solvents, the fact remains that Taniguchi et al. do explicitly disclose the use of propylene urea and ethylene urea as require in the present claims. Further, the choice of these solvents is not from amongst a vast number of solvents. Thus, it therefore would have been obvious to one of ordinary skill in the art to choose solvent, including ethylene urea or propylene urea as presently claimed, and thereby arrive at the claimed invention.

In light of the above, it is the examiner's position that Kurabayashi in view of Taniguchi et al. remains a relevant against the present claims.

**Conclusion**

4. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Callie E. Shosho whose telephone number is 571-272-1123. The examiner can normally be reached on Monday-Friday (6:30-4:00) Alternate Fridays Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on 571-272-1119. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Callie E. Shosho  
Primary Examiner  
Art Unit 1714

CS  
12/2/05